REMARKS

Status of the Claims

Claims 1-8 are pending in this application. No claims have been canceled. Claims 7 and 8 have been added. Claim 1 has been amended to correct an inaccurate translation of the PCT application and to define the organic peroxide. Claim 6 has been amended to particularly and distinctly recite the claimed invention by deleting the confusing phrases "primarily (secondarily) cured product" and inserting "product from primary (secondary) curing". No new matter has been added by the amendments.

Rejections under 35 USC 112, second paragraph

The Examiner rejects claim 1 for indefiniteness because based on the specification, acetone, and t-butanol are decomposition products of the organic peroxide and therefore they will always be present in amounts less than 1 mole per mole of the decomposed product. Applicants traverse the rejection and respectfully request the withdrawal thereof.

Applicants submit amended claim 1, which clearly and distinctly recites the claimed invention. Original claim 1 was confusing because of an inaccurate translation of the PCT application. As evident from the amended claim, from one mole of a peroxide many moles of decomposed compounds, such as acetone and t-butanol are generated. Applicants submit that

the claim amendment to correct the translation obviates this rejection. As such, the rejection should be withdrawn.

The Examiner also rejects claim 6 as indefinite for the offensive phrases "primarily (secondarily) cured product". Applicants amend the claims as suggested by the Examiner by inserting "product from primary (secondary) curing". As such, the rejection should be withdrawn.

Rejections under 35 USC 102(b) and alternatively 103(a)

The Examiner rejects claims 1-6 as anticipated by or in the alternative obvious over WO '995 (95/15995), Tatemoto '972 (USP 4,530,972) or Albano '868 (USP 5,948,868). Applicants traverse the rejection and respectfully request the withdrawal thereof.

Applicants submit that the instant invention is patentable over WO '995, Tatemoto '972 and Albano '868. Neither WO '995, Tatemoto '972 nor Albano '868 disclose or suggest organic peroxides in the amounts recited in the claims. Also, Applicants amend claim 1 so that the organic peroxide is selected from the group consisting of dicumyl peroxide, tert.-butylcumyl peroxide and di-tert.butyl peroxide.

Furthermore, Applicants submit that the lower amount of acetone and tert.-butanol can achieve unexpected superior results of over the cited references. For example, the fluororubber composition can yield a molded product having practically

sufficient properties by way of primary curing, independent of secondary curing, which requires a large amount of heat energy. Evidence of this superior unexpected result can be evaluated by the contribution of secondary curing to the compression set.

As can be understood from the results of Examples 1-5, the compositions of the present inventions provide O-rings having a small compression set (200°C x 70 hours) only by primary curing.

As can be seen from the results of Comparative Example 4, the use of dicumyl peroxide in an amount of 0.25 wt. part deteriorates a compression set, since the curing does not sufficiently proceed. The results of Comparative Example 5 indicates that the use of dicumyl peroxide in an amount of 1.5 wt. parts significantly increases the weight changes ΔW (%).

Molded articles, which are produced by curing the compositions of the present invention, have less contribution of secondary curing to a compression set, and achieve a smaller compression set than those produced from conventional compositions after the primary curing, when the same fluororubbers are used. Thus, it is understood that molded articles produced from the compositions of the present invention have good practical usefulness without being secondarily cured.

Conclusion

As Applicants have addressed and overcome all rejections in the Office Action, Applicants respectfully request that the rejections be withdrawn and that the claims be allowed.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kecia Reynolds (Reg. No. 47,021) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

Pursuant to the provisions of 37 C.F.R. § 1.17 and 1.136(a), Applicants hereby petition for an extension of three (3) months to November 23, 2001 for the period in which to file a response to the outstanding Office Action. The required fee of $920.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made

(Rev. 09/26/01)

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims have been amended as follows:

1. (Amended) A curing composition of a fluororubber comprising

100 parts by weight of a fluororubber which is curable with an organic peroxide

0.1 to 10 parts by weight of a polyfunctional unsaturated compound, and

0.3 to 1.2 parts by weight of a organic peroxide selected from the group consisting of dicumyl peroxide, tert.-butylcumyl peroxide and di-tert.-butyl peroxide,

wherein the total amount of acetone and tert.-butanol contained in the decomposed products of one mole of said organic peroxide, which are generated at a curing temperature, is 2 moles or less [per one mole of the decomposed products].

6. (Amended) A molded article according to claim 5, wherein the contribution of secondary curing to a compression set defined by the following formula is 30 % or less:

$((CS_1 - CS_2)/CS_2) \times 100\%$.

in which CS_1 is the compression set of a product from primary curing [primarily cured product,] and CS_2 is the compression set of a product from secondary curing [secondarily cured product].

Claims 7 and 8 have been added.